Just the Facts About ...

Helping your garden survive the drought

Homeowners are facing an unpromising summer after the driest fall and winter in well over 100 years. A severe drought has settled in across the state and the region, forcing gardeners to make some important decisions in the weeks and months to come.

The first, and perhaps toughest, decision involves whether to begin any large planting projects at all. While mandatory water use restrictions will allow for some watering of garden beds, trees and shrubs, private well-owners and other groundwater users may not want to risk their vital and limited water resources on a newly planted butterfly garden, windbreak, or water garden. Moreover, it is never a good idea to plant trees and shrubs after the end of April. Consider putting off any significant planting chores until October, when most larger plants and perennials can get by with a minimum of watering.

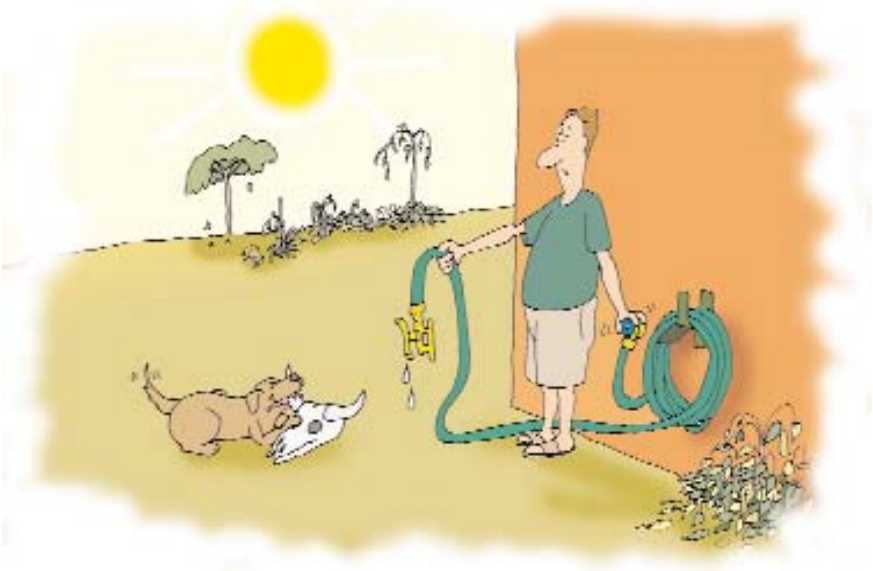
With higher temperatures and drought warnings on the horizon, the best use of gardening time might be spent keeping existing plants alive and well. Trees and shrubs planted recently, or even last year, will probably need to be watered throughout the dry summer months, especially after such a dry autumn and winter. This watering can be done by hand with a hose and spray nozzle, although it can take a considerable amount of time to water deeply and properly. Simply spritzing a tree for a couple of minutes will never provide plants with an adequate drink.

A clever and much more water efficient method is to use a bucket with very small pin holes at the bottom which will allow water to drip out slowly, gradually moistening the plant's root zone. Buckets can be quickly filled with a hose, while the irrigation process will stretch over several hours. Clean milk jugs and old bottled water containers can also be punctured with a pin, and will serve the same purpose, probably allocating several containers for larger trees and shrubs. Most newly planted trees will require between three and five gallons of water per week.

All plantings, whether large or small, new or established, will benefit from a moisture conserving blanket of mulch. Garden beds should receive a generous three or four inch layer. The mulch will keep soil temperatures cooler during hot spells, will conserve soil moisture, and eliminate weeds, which also effectively eliminates competition between weeds and desired plants for available water and nutrients.

Trees and shrubs should also receive a similar three-four inch layer of mulch, broadly applied between the drip-line, the outside perimeter of the tree, and the trunk, although not up against the trunk. It is seldom wise to encourage turf to grow beneath younger trees, as the grass will often out-compete the tree for water.

When using mulch, it is often beneficial to select organic mulches, whether aged, shredded wood mulch, grass clippings, or leaf mold. Leaf mulch is ideal for use around tender herbaceous plants, such as annuals and perennials. Wood mulch is more suited to trees and shrubs,



and grass clippings are ideal for vegetables or other tender plants. Inorganic mulches, such as marble chips, can actually create a "heat sump" in hot, sunny areas, which will accelerate the drying-out of foliage.

Relief for lawns and gardens might be a close as the nearest downspout. Too often runoff from roofs is directed by downspouts to driveways and streets. A water conscious gardener will want to redirect downspouts across lawns or into planting beds using inexpensive flexible drainpipes. Consider that a modest quarter-inch of rain will deposit 150 gallons of water on a typical 1,000 square foot roof. All of that water could find a welcome home feeding plants instead of asphalt.

Rain barrels are another innovative means for capturing and using seasonal rainfall. Garden catalogs and nurseries frequently provide a variety of styles and sizes of rain barrel, with capacities up to 75 gallons. Most feature mosquito- and child-proof designs, as well as handy spigots and hose attachments, which will allow homeowners to hook up drip irrigation systems. Local do-it-yourselfers can even find plans for building their own rain barrels on the Internet. Homestyle barrels can often be assembled in minutes for less than 20 dollars. Many designs also allow several rain barrels to be linked together to capture and store up to hundreds of gallons of rainfall. In areas more dependent upon groundwater supplies, rain barrel concepts can be expanded to cistern systems capable of harvesting anywhere from several hundred to several thousand gallons. With both rain barrels and cisterns, the cost is roughly equivalent to one dollar per gallon of water captured.

Drip irrigation is one of the most advanced techniques for conserving water and doing more with less. A variety of systems made up of pressure regulators and soaker hose, or drip emitters and micro tubing, are becoming much more readily available. Drip systems can reduce water use up to 75 percent. Simple soaker hoses can be placed around plants, covered with mulch, and will slowly ooze water through a porous membrane. Emitter systems are more costly and may require some additional planning, although a number of landscaping firms and mail-order catalog companies have divisions which specialize in developing these systems, even for free with the purchase of the tubing and other equipment. According to water conservation engineer Amy Vickers, at Amy Vickers and Associates, most home gardens will cost between 50 and 250 dollars in materials, depending on the individual system, although extensive landscapes can cost thousands.

When mandatory water restrictions are put in place, lawn watering will be prohibited and punishable by fines. However, lawns can be helped by grass-cycling. Simply let clippings remain on the lawn when you mow, and cut your grass no lower than three inches. Clippings are almost 90 percent water, and, as they filter to the soil surface, they provide a temporary layer of mulch to conserve soil moisture. Keeping grass taller also shades the soil, reducing surface heat and evaporation. You can also assist your lawn by not fertilizing, which only encourages additional foliar growth and demand for water. Lastly, stop worrying. With the exception of bluegrass, most turf varieties will simply enter a dormant phase, snoozing through the heat and drought, and will "green up"with the return of cooler temperatures and, hopefully, rainfall.

Even without mandatory restrictions, it makes sense to adopt a proper watering strategy for landscaped areas. For example, when you must water, do so only in the early morning, never during the day or in the evening. Evening watering can lead to fungal diseases and midday watering can scald foliage. In addition, water applied at midday will evaporate before doing any good, as is also true of watering on windy days, when breezes will hasten evaporation.

With our heavier clay soils, it is best to limit watering to short 15 to 30 minute cycles. Apply water, allow it to soak in, and then water for another cycle. Heavy soils have a lower infiltration rate, meaning that excess water will simply run off and be wasted. Generally speaking, you will only need to water once every five to seven days. Overwatering is a waste of valuable resources and will more readily lead to a host of plant diseases.

Of course, despite official assurances that there is an adequate water supply, such attitudes do not take into consideration the ecological impact of withdrawing water from the Potomac or Patuxent Rivers. There will no doubt be sufficient water for drinking and bathing, even for gardening. However, by wasting water through washing cars or watering lawns during a drought, users are removing water needed to keep aquatic ecosystems healthy and alive. For fish and other aquatic organisms, water is not a convenience or a commodity, it is life itself.

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